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AGRICULTURE.

DELAWARE.

Hon. WILLIAM R. MERRIAM,

Director of the Census.

Sir: I have the honor to transmit herewith, for publication in bulletin form, the statistics of agriculture for the state of Delaware, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that—

The schedules relating to agriculture shall comprehend the following topics: Name of occupant of each farm, color of occupant, tenure, acreage, value of farm and improvements, acreage of different products, quantity and value of products, and number and value of live stock. All questions as to quantity and value of crops shall relate to the year ending December thirty-first next preceding the enumeration.

Delaware, next to Rhode Island, is the smallest state in the Union. It forms the northeastern portion of the level peninsula between Chesapeake Bay on the west and Delaware Bay and the Atlantic Ocean on the east. The soil, especially in the northern part of the state, is a rich clay loam suited to the growth of nearly all kinds of crops. Much of Sussex county is sandy, and better adapted to the culture of fruits, melons, and sweet potatoes than to general farming. Fertilizers are very generally used, a liberal application yielding good returns.

Newcastle county has the largest area of good land, and its farms are more highly improved than are those of the other two counties in the state. The average value per acre of the land in farms in Newcastle county, exclusive of buildings, is \$45.29; in Kent county, \$19.60; and in Sussex county, \$12.52. The average value of buildings per acre of farm land in Newcastle county is \$19.55; in Kent, \$9.25; and in Sussex, \$5.70. The reported gross incomes of the farms (the values of the products not fed to live stock) are, on an average, \$10.89 per acre in Newcastle, \$7.21 in Kent, and \$4.55 in Sussex.

Delaware has long been noted for its fruit. In most seasons of the past peaches brought a larger income than any other crop, although other orchard and small fruits sometimes netted as much as was realized from a great peach harvest. Disease and unfavorable climatic conditions have in the last twenty years materially reduced the

number of peach trees, notably in Newcastle and Kent counties. This loss has been balanced in part by an increase in the number of other orchard trees. The frosts of 1899 almost wholly destroyed the peach crop, and seriously injured other orchard fruits; hence the small value of all orchard fruits reported, \$263,127. The only peaches grown were in the region bordering Delaware Bay, which partially escaped the frosts. The total production was 9,750 bushels, from 2,441,650 trees. The destruction of the peach orchards in Newcastle and Kent counties has been a potent factor in making the land values in those counties materially less in 1900 than in 1890. In Sussex county there was no similar depreciation.

The recent decline of the fruit-raising industry has led to the substitution of other branches of farming, and an increase in the production of market-garden truck, corn, and wheat. It has also stimulated the growth of the dairy and poultry interests.

Delaware is one of the few Atlantic states that has not practically abandoned the cultivation of wheat. In 1899 it harvested 118,740 acres, producing 1,870,570 bushels, with a value of \$1,247,055. The acreage and yield were larger than reported at any previous census. The acreage for Delaware in 1899 was 18 times as great as the total for the 5 New England states of Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut in 1889.

The value of corn was greater than that of any other crop or product. The acreage was 192,025, and the value \$1,725,452. Next after corn and wheat as sources of farm income were vegetables, including potatoes, sweet potatoes, and onions, which had a value in 1899 of \$1,144,221. Poultry and eggs had a value of \$1,084,792; dairy products, \$992,807; hay and forage, \$989,848; and animals sold and slaughtered, \$820,664.

Very respectfully,

L. G. Powers.

Chief Statistician for Agriculture.

AGRICULTURE IN THE STATE OF DELAWARE.

GENERAL STATISTICS.

NUMBER AND SIZE OF FARMS.

There are 9,687 farms in Delaware, with an aggregate area of 1,066,228 acres, of which 754,010, or 70.7 per cent, are improved. The farms constitute 85 per cent of the total land surface of the state, which is 1,254,400 acres.

The following table gives by decades since 1850 the number of farms reported, the total and average acreage, and the per cent of farm land improved.

TABLE 1.-FARMS AND FARM ACREAGE: 1850 TO 1900.

CENSUS YEAR.	Total	NUME	Per cent			
	number of farms.	Total.	Im- proved.	Unim- proved.	Average.	land im- proved.
1900 1890 1880 1870 1860 1850	9, 687 9, 381 8, 749 7, 615 6, 658 6, 063	1, 066, 228 1, 055, 692 1, 090, 245 1, 052, 322 1, 004, 295 956, 144	754, 010 762, 655 746, 958 698, 115 637, 065 580, 862	312, 218 293, 037 348, 287 354, 207 367, 230 375, 282	110 113 125 138 151 158	70. 7 72. 2 68. 5 66. 3 63. 4 60. 8

From 1850 to 1880 the area used in farming increased 134,101 acres. In the last twenty years there has been a slight decline in the farm area, but the amount of improved farm land increased until 1890 and the number of farms until 1900.

FARM RESOURCES AND PRODUCTS.

The values of farm land and improvements, of implements and machinery, live stock, and farm products, are given in Table 2 for each census year, beginning with 1850.

TABLE 2.—VALUES OF FARM RESOURCES AND PRODUCTS: 1850 TO 1900.

CENSUS YEAR.	Total.	Land, im- provements, and buildings.	Implements and machinery.	Live stock.	Farm products.1
1900 1890 1880 1870 2 1860 1850	\$40, 697, 654 45, 620, 460 41, 714, 319 52, 171, 837 35, 388, 946 21, 239, 591	\$84, 436, 040 39, 586, 080 36, 789, 672 46, 712, 870 31, 426, 857 18, 880, 031	\$2,150,560 1,835,570 1,504,567 1,201,644 817,833 510,279	\$4, 111, 054 4, 198, 810 3, 420, 080 4, 257, 323 3, 144, 706 1, 849, 281	\$9, 190, 777 6, 481, 590 6, 320, 345 3 8, 171, 667

¹ For year preceding that designated.
² Values in 1870 were reported in depreciated currency. To reduce to the specie basis of the other figures they must be diminished by one-fifth.
³ Includes betterments and additions to live stock.

The value of all farms, June 1, 1900, was \$34,436,040, of which amount \$10,667,220, or 31.0 per cent, represent the value of buildings. The value of implements and machinery increased from \$510,279 in 1850 to \$2,150,560 in 1900. Live stock increased steadily in value from \$1,849,281 in 1850 to \$4,198,810 in 1890, but in the last ten years has declined 2.1 per cent, and is now worth \$4,111,054. This decline has been brought about mainly

by a decrease in the average value of horses. The farms with their improvements were valued at \$18,880,031 in 1850. That value increased in each decade until 1890, when it was \$39,586,080. In the last ten years, from causes explained elsewhere, it has declined 13 per cent.

FARMS CLASSIFIED BY RACE AND TENURE.

Table 3 gives a comparative exhibit of farm tenure for 1880, 1890, and 1900. In Table 4 the tenure of farms for 1900 is given by race of farmer. The farms under the classification "owners" in Table 3 are subdivided in Table 4 into groups, designated as "owners," "part owners," "owners and tenants," and "managers." These terms denote respectively: (1) Farms operated by individuals who own all the land they cultivate; (2) farms operated by individuals who own a part of the land and rent the remainder from others; (3) farms operated under the joint direction and by the united labor of two or more individuals, one owning the farm or a part of it, and the other, or others, owning no part, but receiving for supervision or labor a share of the products; and (4) farms operated by individuals who receive for their supervision and other services a fixed salary from the owners.

TABLE 3.—NUMBER AND PER CENT OF FARMS OF SPECIFIED TENURES: 1880 TO 1900.

	Total		OF FAR	MS OPER-	PER CENT OF FARMS OPERATED BY-			
CENSUS YEAR.	number of farms.	Owners.	Cash ten- ants.	Share tenants.	Owners.	Cash ten- ants.	Share tenants.	
1900 1890 1880	9, 687 9, 881 8, 749	4, 811 4, 978 5, 041	754 628 511	4, 122 3, 775 8, 197	49.7 53.1 57.6	7.8 6.7 5.8	42.5 40.2 36.6	

TABLE 4.—NUMBER OF FARMS, CLASSIFIED BY RACE AND TENURE, JUNE 1, 1900, WITH PERCENTAGES.

PART 1.—NUMBER OF FARMS OF SPECIFIED TENURES.

RACE.	Total num- ber of farms.	Own- ers.	Part own- ers.	Owners and tenants.	Man- agers.	Cash tenants.	Share tenants.
The State	9, 687	4,340	314	26	131	754	4, 122
White Negro	8, 869 818	4,043 297	280 84	25 1	116 15	679 75	3,726 896

PART 2.—PER CENT OF FARMS OF SPECIFIED TENURES.

The State	100	44.8	3.2	0.3	1.4	7.8	42,5
WhiteNegro	100	45. 6	3. 2	0.3	1.8	7.6	42.0
	100	36. 3	4. 2	0.1	1.8	9,2	48.4

DIVISION OF FARMS, AND FARM TENANCY.

In fifty years the number of farms has increased nearly 60 per cent. As their acreage has increased only 11 per cent, the increase in number must have been caused chiefly by division of some farms. Such division would explain the reduction in the average size of farms from 158 acres in 1850 to 110 acres in 1900. The greatest dividing of farms took place between 1860 and 1880, when the number increased 2,091 and the average size was reduced from 151 to 125 acres. In the last twenty years the number of farms increased 938 and the average size decreased from 125 to 110 acres. Closely associated with the division of farms and the reduction in average size, has been an increase, during the last twenty years (for which alone the figures have been gathered) in the number and proportion of tenant-operated farms. Since 1880 the number of tenant-operated farms has increased from 3,708 to 4,876, and the percentage of the total from 42.4 to 50.3. The increase from 1860 to 1880, attending the great division of farms above described, was probably even more marked. The growth of farm tenancy, to which attention has been called, has taken place under circumstances which have operated to assist a large number of families in rising from wage service to farm tenancy or ownership. The following facts are significant as illustrating this statement: Of the farms in 1900, 818, or 8.4 per cent, were operated by negroes or those of negro descent. In 1850 the negroes owning farms in Delaware, as in the other slave states, were so few in number as to be a negligible quantity. Hence it can be said that practically none of the negroes operating farms in 1900, or of their negro ancestors, were farm owners at the middle of the nineteenth century. In 1900, 332 farms were operated by negroes who owned the whole or a part of the land contained therein; 471 were operated by negro tenants; and 15 by salaried negro managers. A very small number of these farmers were the descendants of men who had risen in their lifetime from wage service or slavery to farm tenancy or ownership. The great majority were born in families that occupied industrial positions much lower than the ones in which they now stand.

This rising of the colored farm workers is probably not exceptional but is shared by those of all races. According to the statistics of the census report on Farms and Homes, in 1890 the per cent of owners among farmers was smallest in all states for the age period under 25 years, and increased steadily to the age period of 60 years and over.

In Delaware only 20.8 per cent of the farmers under 30 years of age were owners. Among farmers of all ages the per cent of owners was 50.6, or two and one-half times as great, and for those over 60 years of age it was 72.2, or three and one-half times as great. This variation in the relative number of farm owners and tenants at various age periods is such as accompanies an upward movement on farms, and is found wherever individuals who are farm tenants in early and middle life become owners at

later periods. The tenants thus becoming owners may be the children of those whom they succeed in possession, or they may be individuals who began their career in wage service. In either case farm tenancy for them is a way station on the road to ownership. So far as can be judged from the statistics given, the number of owners in 1900 who have risen from lower positions is at least 2,000, and may greatly exceed that number.

The above conclusions, derived from a study of the statistics of Farms and Homes are confirmed by a review of certain data relating to population, in connection with the figures already given of the number of farms at various periods since 1850. The farming population of any state consists of the families of those who, as owners, tenants, or wage receivers, live and toil upon farms. Its variations from decade to decade can be determined by ascertaining the changes in the number of inhabitants residing outside of cities, towns, and hamlets. cent of increase or decrease in this population corresponds very closely with the per cent of gain or loss in the farming population. In 1850 the population of Delaware, outside of cities, towns, and hamlets, was 72,279, and in 1900 it was 74,834. The farming population could not, therefore, have increased more than 3.5 per cent.

In the same period the number of farms increased from 6,063 to 9,687, or 59.7 per cent, approximately 17 times as fast as the farming population. The number of farmers, that is, persons operating farms as owners or tenants, is the same at any period as the number of farms. Had these farmers increased in number only as fast as did the farming population there would have been less than 6,300 owners and tenants instead of 9,687. The difference represents the number added in fifty years to the ranks of owners and tenants from former slaves and wage receivers. It makes an aggregate of approximately 3,400 persons who rose in a half century from a lower position to that of farm tenancy or ownership.

OWNERSHIP OF RENTED FARMS.

The ownership of 4,711 of the 4,876 rented farms was ascertained by the enumerators. That of 165 was unre-The titles to the 4,711 farms are vested in 3,570 owners, an average of 1.3 farms to each. Of the 3,570 owners, 2,987 possess one farm each, the others holding the titles of from 2 to 15 farms each, as fol lows: 346, 2; 121, 3; 51, 4; 24, 5; 10, 6; 9, 7; 5, 8; 8, 9; 3, 10; 1, 11; 3, 13; and 2, 15. Of the 3,570 owners, 3,040, possessing 4,097 farms, reside in Delaware. The owners of 3,732 of these farms reside in the same counties in which their farms are located. Of the farms belonging to nonresidents, 395 are owned by 344 residents of the North Atlantic states; 193, by 162 residents of the South Atlantic states; 14, by 13 residents of the North Central states; 4, by 4 residents of the South Central states; 7, by 6 residents of the Western states; and 1, by a resident of a foreign country.

The wide distribution of the ownership of rented farms, as presented, demonstrates that Delaware is not suffering from a permanent class of nonresident landlords. The large number of rented farms located in the same county with their owners, and the large number of persons owning but one such farm each, indicate the existence of a numerous class, once operators as well as owners, who have retired from active farming and who rent the whole or parts of their farms. The smaller average size of owned farms than of share tenant farms, evinces the fact that many farm owners, as they reach advanced years, lease the greater part of their holdings and retain small tracts for their own use, or rent their large farms and purchase smaller ones on which to retire from the arduous labor of farming on the accustomed scale.

FARM WEALTH OF WHITE AND NEGRO FARMERS.

Of the 9,687 farms, 8,869, or 91.6 per cent, are operated by whites, and 818, or 8.4 per cent, by negroes. Of the latter class of farms 297 are operated by owners and 35 by part owners. The value of their farms, including implements, machinery, and live stock, together with the value of implements, machinery, and live stock on the farms which other negroes operate as tenants, is \$495,187. This amount is probably somewhat in excess of the actual farm wealth of the negro farmers of Delaware.

Table 5 gives a classification by tenure of the number and area of farms and value of property on farms operated by white and negro farmers, respectively. Table 6 presents a similar classification of the average values of the several forms of farm property, June 1, 1900, of the products of 1899 not fed to live stock, and the per cent of the total farm value represented by the products not fed to live stock.

TABLE 5.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER AND TENURE, WITH PERCENTAGES.

RACE OF FARMER, AND	Num-	A.O	RES IN FAR	MS.	VALUE OF FARM PROPERTY.		
RACE OF FARMER, AND TENURE.	ber of farms.	Aver- age num- ber.	Total number.	Per cent.	Total.	Per cent.	
The State	9, 687	110.1	1,066,228	100.0	\$40,697,654	100.0	
Total white farmers	8,869	114.3	1,013,662	95.1	39, 302, 838	96. 6	
Total negro farmers	818	64.3	52,566	4.9	1, 394, 816	3. 4	
White owners White part owners White owners and tenants White managers White cash tenants White share tenants	4, 043	95. 5	386, 112	38.1	15, 721, 219	40. 0	
	280	80. 5	22, 538	2.2	873, 442	2. 2	
	25	109. 6	2, 740	0.3	187, 282	0. 5	
	116	126. 0	14, 621	1.4	1, 342, 366	3. 4	
	679	91. 5	62, 120	6.1	4, 642, 655	11. 8	
	3, 726	141. 0	525, 531	51.9	16, 585, 874	42. 1	
Negro owners	297	37.6	11,161	21. 2	828, 797	23.6	
Negro part owners	34	33.1	1,127	2. 1	30, 498	2.2	
Negro owners and tenants	1	85.0	85	0. 2	675	0.1	
Negro managers	15	101.7	1,525	2. 9	112, 019	8.0	
Negro cash tenants	75	50.9	3,818	7. 3	219, 271	15.7	
Negro share tenants	896	88.0	34,850	66. 3	703, 556	50.4	

TABLE 6.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY RACE OF FARMER, AND TENURE.

	AVE	RAGE V	ALUES PER	FARM	OF	
	Farm 1	property	, June 1, 1	900.		Per cent of products
RACE OF FARMER, AND TENURE.	Land and improve- ments (except build- ings).	Build- ings.	Imple- ments and machin- ery.	Live stock.	Products of 1899 not fed to live stock.	not fed, to value of farm property.
The State	\$2,454	\$1,101	\$222	\$424	\$7 54	17.9
Total white farmers Total negro farmers	2, 582 1, 065	1, 168 371	234 89	447 180	793 325	17.9 19.0
White owners White part owners White owners and ten-	2, 070 1, 747	1, 174 901	235 183	410 288	735 669	18.9 21.5
white managers White managers White cash tenants White share tenants		1, 415 2, 289 1, 733 1, 044	276 414 268 225	483 660 493 483	1, 052 1, 233 889 833	14.0 10.7 18.0 18.8
Negro owners	572 483	307 215	77 64	151 135	275 274	24. 9 30. 6
Negro owners and ten- ants		100 974 522 381	50 215 85 97	125 489 165 197	270 879 319 3 46	40.0 11.8 10.9 19.5

The average area of farms operated by negroes is 64.3 acres, while that of the farms of white farmers is 114.3 acres, or nearly twice as great. The relative differences in values of land, buildings, implements, and live stock are still more marked. The farms of negroes constitute 8.4 per cent of all farms in the state, but contain only 4.9 per cent of the total acreage, and have a value of but 3.4 per cent of the aggregate. These facts show that the negro farmers, nearly all of whom have risen from the position of slaves or wage laborers, have made progress, but have not at a bound attained to the same measure of independence or wealth as that enjoyed by their more fortunate neighbors. As owners or tenants, they have been able to obtain control of the poorer classes of farms, valued at \$17 per acre, while those operated by white farmers have an average value of \$23 per acre. With cheaper lands, a poorer outfit of implements, and less live stock, they are able to report farm products not fed to live stock averaging in value \$325 per farm, while the white farmers report \$793. The value of the products not fed to live stock represents, however, 19 per cent of the value of all farm property of negro farmers, while the corresponding per cent for white farmers is only 17.9.

RELATIVE AREAS AND VALUES OF FARMS OF DIFFERENT TENURES.

The average size of all farms in Delaware is 110.1 acres; of farms of "owners," 91.5; "part owners," 75.4; "owners and tenants," 108.7; "managers," 123.3; "cash tenants," 87.5; and "share tenants," 135.9. Comparing these averages with those in Table 6, it is found that the farms of

managers are not only larger, but more valuable per acre than the farms of owners, and that the share tenant farms are the largest of any group, but the least valuable per acre. The managed farms appear to be the best cultivated. This is shown by the high average expenditures for labor and fertilizers. For farms of white managers these averages are, for labor \$314, and for fertilizers \$108, per farm; for the negro managers they are \$300 and \$117, respectively; while for all farms of white farmers they are \$118 and \$59, and for all farms of negro farmers \$32 and \$24, respectively. The cash tenant farms are worth, on an average, more per farm and per acre than the owned farms, while the share tenant farms are worth more per farm but less per acre than the owned farms. The position of cash tenants is distinctly better, on an average, than that of share tenants. The greater relative increase in the number of cash tenants than of share tenants in the past twenty years, shown in Table 3, is an indication of an upward trend in the status of the farmers.

Table 6 gives for each group of farms the average value per farm of the products of 1899 not fed to live stock. This is the average gross income of each class of farms. The same table gives the per cent which this income is of the value of all farm property. The per cent is, as a rule, lowest for the most valuable and highest for the least valuable farms. This illustrates in agriculture the well-known economic law of diminishing returns, and explains why the high-priced managed and cash tenant farms show smaller percentages of income than do the less valuable farms of owners and share tenants.

FARMS CLASSIFIED BY AREA.

Tables 7 and 8 give, with slight variations, for farms classified by area, the facts shown in Tables 5 and 6 for farms by race and tenure.

TABLE 7.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY AREA, WITH PERCENTAGES.

	NUMBER OF FARMS.		ACRES IN	FARMS.	VALUE OF FARM PROPERTY.	
AREA.	Total.	Per cent.	Total.	1,066,228 100.0 \$40,697,654 10	Per cent.	
The State	9, 687	100.0	1,066,228	100.0	\$40, 697, 654	100.0
Under 3 acres	38 292 547 1, 568 2, 610 2, 923 1, 133 500 71 5	0. 4 3. 0 5. 6 16. 2 26. 9 30. 2 11. 7 5. 2 0. 7 0. 1	62 1, 813 7, 705 52, 439 • 186, 885 370, 605 234, 557 161, 762 42, 682 7, 718	0.2 0.7 4.9 17.5 34.8 22.0 15.2 4.0 0.7	76, 567 432, 228 910, 900 3, 394, 204 8, 252, 894 13, 206, 593 8, 175, 581 5, 102, 374 997, 035 89, 328	0.2 1.1 2.2 8.3 20.3 32.5 20.1 12.7 2.4 0.2

TABLE 8.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS. CLASSIFIED BY AREA.

		Farm property, June 1, 1900.							
	Pauli	propert	y, June 1,	1500.		of			
AREA.	Land and improve- ments (except build- ings).	Build- ings.	Imple- ments and machin- ery.	Live stock.	Products of 1899 not fed to live stock.	products not fed, to value of farm property.			
The State	\$2,454	\$1,10I	\$222	\$424	\$754	17.9			
Under 3 acres	641	1,078 660 628 685 906 1,219 1,709 1,989 2,039 2,320	144 70 97 116 179 253 354 451 792 492	76 109 148 195 328 483 740 963 1,344 960	596 272 268 381 574 836 1,286 1,761 2,347 2,226	29. 6 18. 4 16. 1 17. 6 18. 1 18. 5 17. 8 17. 1 16. 7 12. 5			

The average values given in Table 8, with one exception, are lowest for farms of from 3 to 9 acres, and rise in an almost unbroken series to those containing 1,000 acres and over. The farms containing less than 3 acres have higher average values for most forms of farm property than those containing from 3 to 19 acres, and have products of an average value greater than any other group of farms containing less than 100 acres, and greater per acre than for any other group. In this group of small farms are included a number of florists' establishments and 1 city dairy, with large relative incomes.

Of the farms containing over 1,000 acres, 4 are operated by share tenants and 1 by its owner. Of those containing less than 3 acres, 28 are operated by their owners; 7, by cash tenants; 2, by share tenants; and 1 by an individual who owns a part and leases a part. The per cent of owned farms is relatively great in the groups containing less than 50 acres, while the per cent of farms conducted by tenants is large for the groups containing more than 100 acres. As compared with share tenants, cash tenants are less numerous in the groups containing over 100 acres. The larger farms are worth on an average far less per acre, and give a smaller return per acre, than do farms of smaller areas. This fact accounts for the relatively small returns per farm for share tenants, shown in Table 6, and to which attention has already been called.

FARMS CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

Tables 9 and 10 present the leading facts concerning the number, areas, values, and average values of farms classified by principal source of income. If, for any farm, 40 per cent of the products not fed to live stock consists of hay and grain, the farm is designated a hay and grain farm. In the same way, should 40 per cent of the products consist of vegetables, the farm is designated a vegetable farm. The classification of the other groups depends upon the same general principle.

TABLE 9.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME, WITH PERCENTAGES.

PRINCIPAL SOURCE OF	NUMBER OF FARMS.		ACRES IN	FARMS.	VALUE OF FARM PROPERTY.		
INCOME.	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.	
The State	9,687	100.0	1, 066, 228	100.0	\$40,697,654	100.0	
Hay and grain Vegetables Fruit Live stock Dairy produce. Tobacco Sugar. Flowers and plants Nursery stock Miscellaneous.	487 2,956 538 1	21. 9 7. 1 5. 0 30. 5 5. 6 0. 2 0. 1 29. 6	342, 602 42, 517 43, 524 244, 917 50, 956 104 60 219 836 340, 493	32.1 4.0 4.1 23.0 4.8 	18, 156, 687 2, 235, 834 1, 856, 997 6, 750, 287 5, 348, 202 1, 040 1, 279 182, 045 52, 745 11, 112, 538	32.3 5.5 4.6 16.6 13.1 0.5 0.1 27.8	

Table 10.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

	ΑVI	AVERAGE VALUES PER FARM OF—						
PRINCIPAL SOURCE OF INCOME.	Farm	Farm property, June 1, 1900.						
	Land and improve- ments (except build- ings).		Imple- ments and ma- chinery.	Live stock.	Products of 1899 not fed to live stock.	products not fed, to value of farm property.		
The State	\$2,454	\$1,101	\$222	\$424	\$754	17.9		
Hay and grain Vegetables Fruit Live stock Dairy produce Tobacco Sugar Flowers and plants Nursery stock Miscellaneous	2,047 2,259 1,192 6,199 850	1,463 850 989 654 2,557 150 200 4,388 1,495 1,074	307 151 199 141 398 	608 216 366 297 792 40 359 192 154 414	1, 100 545 1, 002 416 1, 182 70 420 2, 864 1, 836 753	17.8 16.7 26.3 18.2 11.9 6.7 32.8 33.0 38.3 19.4		

The hay and grain farms have the largest average area, 161.1 acres, and the miscellaneous farms (those not deriving 40 per cent of their income from any one source) come next, with an average size of 119.0 acres. Dairy farms have an average size of 94.7 acres; fruit farms, 89.4; and vegetable farms, 62.1.

The per cent of all farms operated by "owners" is 44.8. The same class operates 64.5 per cent of florists' establishments; 54.5 per cent of the live stock farms; 44.8 per cent of the dairy farms; 41.2 per cent of the vegetable farms; and 26.7 per cent of the hay and grain farms. Cash tenants operate 30 per cent of the dairy farms, and 13.9 per cent of the vegetable farms, while of all farms they operate but 7.8 per cent.

The dairy farms have the greatest average value of farm property, and of all the larger groups of farms their gross income represents the smallest per cent of the capital invested. Fruit farms have incomes showing a larger per cent of returns on investments than any other numer-

ous class of farms. Their percentage is exceeded only by the small groups of farms of which the chief products were nursery stock, flowers and ornamental plants, and sorghum sirup.

FARMS CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

Tables 11 and 12 present data relating to farms classified by reported value of products not fed to live stock. Thirty-four farms, ranging in size from 3 to 500 acres, and having an average area of 54.2 acres, report no products. Of these farms, 22 were occupied, June 1, 1900, by tenants. The absence of crop reports for the 34 farms is due to a number of causes. Some of these farms were practically unoccupied in 1899, but were being cultivated at the time of the enumeration in 1900. Others had changed owners or tenants, and the farmers in charge, June 1, 1900, were unable to give definite information concerning the products of the preceding year. Most of the farms with incomes less than \$100 were only partially cultivated in 1899, or the enumerators failed to secure complete reports of their products.

TABLE 11.—NUMBER AND AREA OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY REPORTED VALUE OF PRODUCTS, WITH PERCENTAGES.

		ER OF . RMS.	ACRES IN FARMS.		VALUE OF FARM PROPERTY.	
VALUE OF PRODUCTS.	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.
The State	9,687	100.0	1,066,228	100.0	\$40, 697, 654	100.0
Products, \$0	34 135 314 1,697 2,537 2,597 2,019 354	0. 4 1. 4 3. 2 17. 5 26. 2 26. 8 20. 8 3. 7	1, 843 6, 969 16, 323 99, 730 212, 459 300, 856 329, 963 98, 085	0. 2 0. 7 1. 5 9. 4 19. 9 28. 2 30. 9 9. 2	24, 260 194, 260 337, 490 2, 209, 470 5, 156, 780 10, 145, 884 16, 627, 580 6, 001, 930	0.1 0.5 0.8 5.4 12.7 24.9 40.9 14.7

TABLE 12.—AVERAGE VALUES OF FARM PROPERTY AND PRODUCTS, CLASSIFIED BY REPORTED VALUE OF PRODUCTS.

	AVI	AVERAGE VALUES PER FARM OF-						
	Farm	property		Per cent of products				
VALUE OF PRODUCTS.	Land and improve- ments (except build- ings).	Build- ings.	Imple- ments and machin- ery.	Live stock.	Products of 1899 not fed to live stock.	not fed, to value of farm property.		
The State	\$2,454	\$1,101	\$222	\$424	\$754	17.9		
Products, \$0	440 1,032 647 721 1,093 2,193 4,833 11,192	170 272 299 382 579 1,065 2,165 3,608	35 64 45 63 119 221 445	69 71 84 136 242 428 793 1,460	27 76 177 362 704 1,507 8,339	1.8 7.1 13.6 17.8 18.0 18.3		

There is no great difference in the average sizes of the farms of the first 3 groups. They contain 54.2, 51.6, and 52 acres, respectively. The average area of farms with in-

comes varying from \$100 to \$249 is somewhat greater—58.8 acres. For the other 4 groups the average sizes are 83.7, 115.8, 163.4, and 277.1 acres, respectively.

In Table 13 is given, by counties, an exhibit of the most important facts relative to the number and area of farms, the values of farm property, and expenditures.

TABLE 13.—NUMBER AND AREA OF FARMS AND VALUES OF FARM PROPERTY, JUNE 1, 1900; VALUE OF PRODUCTS OF 1809 NOT FED TO LIVE STOCK; AND EXPENDITURES IN 1899 FOR LABOR AND FERTILIZERS, BY COUNTIES.

	NUMBER (OF FARMS.	ACRES IN FARMS. VALUES OF FARM PROPERTY.			ACRES IN FARMS.		VALUES OF FARM PROPERTY.					EXPENDI	TURES.
COUNTIES.	Total.	With build- ings.	Total.	Im- proved.	Land and improvements (except buildings).	Buildings.	Imple- ments and machin- ery.	Live stock.	Value of products not fed to live stock.	Labor.	Fertili- zers.			
The State	9, 687	9, 545	1,066,228	754,010	\$23, 768, 820	\$10,667,220	\$2,150,560	\$4, 111, 054	\$7,300,857	\$1,075,960	\$539,040			
Kent Newcastlė Sussex	2, 814 2, 088 4, 785	2,777 2,070 4,698	338, 205 244, 823 483, 200	244, 882 197, 102 312, 526	6, 628, 200 11, 088, 570 6, 052, 050	3, 128, 370 4, 785, 290 2, 753, 560	665, 030 840, 850 644, 680	1, 289, 509 1, 557, 124 1, 814, 421	2, 437, 578 2, 666, 574 2, 196, 705	353, 470 487, 470 235, 020	194, 190 154, 630 190, 220			

NUMBER AND VALUE OF LIVE STOCK.

At the request of the various live stock associations of the country, a new classification of domestic animals was adopted for the census of 1900. Neat cattle are grouped by age in accordance with their present and prospective relations to the dairy industry and to the supply of meat products. Horses and mules are classified by age, and neat cattle and sheep by age and sex. The new classification permits very close comparison with the figures obtained at preceding decennial periods.

TABLE 14.—NUMBER AND VALUE OF DOMESTIC ANI-MALS, FOWLS, AND BEES, JUNE 1, 1900.

	ANIMALS. Age in years.		ON FARMS.				
Animals.			Value.	Average value.	Not on farms.		
Calves Steers Steers Steers Steers Steers Steers Sulls Heifers Cows kept for milk Cows and heifers not kept for milk Horses Horses Mule colts Mules Asses and burros.	Under 1	9, 363 1, 042 970 1, 321 1, 654 5, 373 32, 591 1, 866 1, 590 1, 903 26, 229 107 289 4, 349	\$83, 940 15, 446 22, 919 45, 630 40, 518 91, 933 998, 972 46, 527 42, 110 84, 427 1, 641, 088 5, 450 17, 980 822, 021	\$8. 97 14. 82 23. 63 34. 54 24. 50 17. 11 80. 50 24. 93 26. 48 44. 37 62. 57 50. 93 62. 04 74. 04 75. 33	Number. 64 10 11 40 2 52 1,054 7 28 30 6,644		
Sheep (ewes) Sheep (rams and	Under 1 1 and over 1 and over	4,801 6,360 604	18,079 22,899 2,610	3. 77 3. 60 4. 32	11		
wethers). Swine Goats Fowls: 1		46, 732 143	234, 472 519	5.02 3.63	4,130 62		
Chickens 2 Turkeys Geese Ducks Bees (swarms of)		628, 866 19, 045 6, 458 10, 933 10, 187	357, 475	1.99			
Value of all live stock.			4, 111, 054				

 $^{^1\,\}rm The$ number reported is of fowls over three months old. The value is for all, old and young. $^2\,\rm Including$ Guinea fowls.

The average value of nearly all classes of live stock is higher in Newcastle and lower in Sussex county than is shown in Table 14 for the state. These variations in value correspond in general with the variations in the average values of farm lands and farm property in the same counties.

No report was secured of the value of animals not on farms. The number of such animals was obtained, however, and is shown in the foregoing table. It is probable that animals of this class have a somewhat higher average value than those on farms, but, allowing the same average, the total value of live stock, exclusive of poultry and bees not on farms, is, in round numbers, \$4,600,000.

DISTRIBUTION OF HORSES AND DAIRY COWS ON FARMS BY SPECIFIED CLASSES.

Table 15 presents for a few of the groups of farms shown in detail in Tables 5 to 12, inclusive, the number of farms reporting, the total number of horses and dairy cows, and the average number of those animals to a farm. In computing the averages presented, only farms which report the particular kind of stock under consideration are included.

TABLE 15.—DISTRIBUTION OF HORSES AND DAIRY COWS, BY SPECIFIED CLASSES OF FARMS, JUNE 1, 1900.

		HORSES.			DAIRY CO	vs	
			,				
CLASSES.	Farms report- ing.	Number.	Average number per farm.	Farms report- ing.	Number.	Average number per farm.	
Total	9,033	29,722	3.3	7,689	32, 591	4.2	
White farmers	8,342	28, 274	3. 4	7,300	31, 813	4.4	
	691	1, 448	2. 1	389	778	2.0	
Owners¹	4,356	12, 434	2. 9	3, 765	13, 034	3, 5	
Managers	112	536	4. 8	97	621	6, 4	
Cash tenants	706	2, 295	3. 3	552	3, 585	6, 4	
Share tenants	3,859	14, 457	3. 7	3, 275	15, 401	4, 7	
Under 20 acres	724	1,077	1.5	391	630	1.6	
	3,850	8,902	2.8	3, 103	8, 632	2.8	
	2,806	9,931	3.5	2, 583	11, 294	4.4	
	1,097	5,869	5.4	1, 069	7, 063	6.6	
	556	3,943	7.1	543	4, 972	9.2	
Hay and grain Vegetable Fruit Live stock Dairy produce Miscellaneous	1, 953	10,068	5. 2	1,750	11, 421	6.5	
	625	1,408	2. 3	359	708	2.0	
	452	1,136	2. 5	324	702	2.2	
	2, 732	6,116	2. 2	2,183	5, 672	2.6	
	513	2,129	4. 2	538	5, 368	10.0	
	2, 758	8,865	3. 2	2,535	8, 720	3.4	

¹ Including "part owners" and "owners and tenants."

White farmers have an average of 3.4 horses and 4.4 dairy cows to a farm, while negro farmers have 2.1 horses and 2.0 dairy cows. The farms with managers and cash tenants have the largest average number of dairy cows

of any group classified by tenure, which is an important factor in giving to these farms the high average incomes shown in Table 6. The relatively large number of horses on farms with managers contributes to the same result.

Horses and cows increase in number with the increase in size of farms. The average number of horses is greater for hay and grain farms than for any others grouped by principal source of income. As might be expected the average number of dairy cows is greatest on dairy farms.

CHANGES IN THE LIVE-STOCK INDUSTRY IN FIFTY YEARS.

The following table gives the number of dairy cows, other neat cattle, horses, mules and asses, sheep, and swine, for each census year, beginning with 1850. In the figures for "other neat cattle" in 1900, the number of calves is included, although it is uncertain whether any calves were reported in preceding census reports under this designation.

TABLE 16.—NUMBER OF DAIRY COWS, OTHER NEAT CATTLE, HORSES, MULES AND ASSES, SHEEP, AND SWINE: 1850 TO 1900.

CENSUS YEAR.	Dairy cows.	Other neat cattle.	Horses.	Mules and asses.	Sheep.	Swine.
1900	32, 591	21, 589	29, 722	4, 760	16, 964	46,732
	32, 574	19, 270	25, 656	4, 819	12, 265	44,981
	27, 284	26, 268	21, 933	3, 931	21, 967	48,186
	24, 082	25, 908	16, 770	3, 584	22, 714	39,818
	22, 595	35, 126	16, 562	2, 294	18, 857	47,848
	19, 248	33, 963	13, 852	791	27, 503	56,261

1 Lambs not included.

Dairy cows and horses have increased in number constantly since 1850. The number of mules and asses increased until 1890, and that of other animals has fluctuated from decade to decade with a general downward tendency. The increase in the number of dairy cows marks the growth of the dairy industry, while the increase in the number of horses and mules and asses denotes their substitution for working oxen, and also the greater use of improved farm machinery in the cultivation of the soil.

ANIMAL PRODUCTS.

The quantities and values of wool, dairy produce, and other animal products, including the value of fowls raised, and animals sold and slaughtered for food, are given in Table 17. The value of all such products is \$2,915,417, or 39.9 per cent of the farm income of 1899.

TABLE 17.—QUANTITIES AND VALUES OF ANIMAL PRODUCTS, VALUE OF POULTRY RAISED, AND VALUES OF ANIMALS SOLD AND SLAUGHTERED ON FARMS IN 1899.

PRODUCTS.	Unit of measure or weight.	Quantity.	Value.
Wool Milk Cream Butter Cheese Ergs Poultry Honey Wax Animals sold Animals slaughtered	Gallons Pounds Pounds Dozens Pounds	1,960	\$6,618 992,807 488,401 596,391 10,536 396,264 424,400
Total value			2,915,417

DAIRY COWS AND PRODUCE.

That the dairy interests have been increasing with each decade is shown in Table 16 by the number of dairy cows enumerated. The changes in the last ten years are quite noteworthy. The milk produced in 1889 was 10,699,362 gallons, or 328.5 gallons per cow; in 1899, 12,681,268 gallons, or 389.1 gallons per cow. The total production of milk increased 18.5 per cent, and the average per cow 18.4 per cent. The total value of the dairy produce of the state was \$992,807. This represents 10.8 per cent of the value of all the products of farms, and 13.6 per cent of the gross farm income.

POULTRY AND EGGS.

In 1890 the census reported 900,212 chickens, 70,578 turkeys, 10,525 geese, and 50,046 ducks. By a comparison of these figures with those given in Table 14 it will be noted that there is an apparent decrease in the number of most domestic fowls. This must be due to the fact that in 1900 the enumerators were instructed to report only fowls three months old and over, while in 1890 no such limitation was made, and it is possible that more young fowls were included in the reports of 1890 than of 1900. This is rendered more probable by the difference in the total and average number of eggs reported. In 1889 there were 2,218,754 dozens, while in 1899 the number was 3,571,870 dozens. The value of the poultry raised in 1899 was \$596,391, and the value of eggs produced was \$488,401. Poultry and eggs together returned a larger sum than was derived from dairy products, hay, fruit, or vegetables, exclusive of potatoes and sweet potatoes; they were worth almost as much as the wheat crop, and about two-thirds as much as the corn crop.

CROPS OF 1899.

TABLE 18.—ACRES, QUANTITIES, AND VALUES OF VEGETABLE PRODUCTS OF 1899.

THE PROPERTY	717 L TU	ODODIE OF	113444	1282111111
PRODUCTS.	Acres.	Unit of measure.	Quantity.	Value.
Corn	192, 025	Bushels	4,736,580	\$1,725,452
Wheat	118,740	Bushels		1, 247, 055
Oats	5,247	Bushels	131,960	43, 337 30
Barley	1,103	Bushels		5, 831
Buckwheat	1,652	Bushels	23, 980 65	10, 778
Kafir corn	2	Bushels Bushels	3,515	14, 290
Clover seedHay and forage	74,800	Tons	128, 193	989, 848
Tobacco	4,000	Pounds	2,000	989, 848 200
Broom corn	4	Pounds		221 1,822
Dry beans	$\frac{100}{518}$	Bushels		5, 086
Other vegetables	23, 938	Dusticis		819, 051
Potatoes	5, 755	Bushels	414,610	221, 411
Sweet potatoes	2,265	Bushels		96, 566
Onions Sorghum cane	49 113	Bushels	8,269	7, 193 146
Sorghum sirup		Gallons	8, 952	3, 175
Small fruits	10,613			461, 621
Grapes	1 290	Centals	13, 753	231,701
Orchard fruits				263, 127 690
Nuts Forest products				250, 335
Flowers and plants		are the real test than the best time that got upon one real per year and the first	2 - 2 - 14 - 15 - 16 - 16 - 16 - 16 - 16 - 16 - 16	57,013
Seeds	7			1,861
Nursery stock	174	The state of the s		17, 241
Peanuts Miscellaneous	8	Bushels	. 23	29 220
MISCEIRIEUUS	8			220
Total	473, 962			6, 275, 360

¹ Estimated from number of vines or trees. ² Including wine, raisins, etc.

In 1899 the value of all crops was \$6,275,360, the value of the animal products, including the animals sold, and slaughtered for food, was \$2,915,417, and the total value of agricultural products was \$9,190,777. In this total are included products fed to live stock on the farms of the producers, amounting in value to \$1,889,920. Deducting this amount leaves \$7,300,857, the gross farm income, which is referred to in the text and tables of this bulletin under the general designation, "products not fed to live stock."

FRUITS AND VEGETABLES.

The changes in orchard fruits since 1890 may be seen in the following table:

TABLE 19.—ORCHARD TREES AND FRUITS: 1890 AND 1900.

	NUMBER	OF TREES.	BUSHELS OF FRUIT.		
FRUITS.	1900.	1890.	1899.	1889.	
Apples Apricots Cherries Peaches Pears Plums and prunes	567, 618 82 14, 436 2, 441, 650 394, 814 49, 165	340, 648 139 9, 843 4, 521, 623 118, 574 3, 301	702, 920 28 8, 066 9, 750 156, 208 7, 315	109, 644 1, 061 457, 201 26, 029 419	

The number of peach trees in 1900 was 46 per cent less than in 1890, and the reported product in 1899 was only 2.1 per cent of that of ten years before. In the ten years since 1890 the number of apple trees increased 66.6 per cent; cherry trees, 46.7; pear trees, 233.0; plum and prune trees, 1,389.4. The yields of these fruits show still larger proportionate increases.

In 1889 the total value of garden products, including small fruits sold, was \$220,880. In 1899 the value of vegetables, other than potatoes, sweet potatoes, and onions, was \$819,051, and of small fruits, \$461,621, a total of \$1,280,672. Nearly three-fourths of the acreage of miscellaneous vegetables was devoted to tomatoes, and the receipts from their sale comprised over one-half the amount realized from all such vegetables. The number of farms reporting the culture of tomatoes as a business was 4,622, with an area of 15,922 acres and a yield of 2,307,894 bushels. The total acreage and value of tomatoes were exceeded only by those of the corn, wheat, and hay crops.

CHANGES IN CROPS SINCE 1889.

Table 20 presents the acreage and production of the most important farm crops in 1889 and 1899.

TABLE 20.—ACREAGE AND PRODUCTION OF PRINCIPAL FARM CROPS: 1889 AND 1899.

	NUMBER (F ACRES.	NUMBER OF BUSHELS.		
CROPS.	1899.	1889.	1899.	1889.	
Barley Buckwheat Corn Oats Rye Wheat Hay and forage Sweet potatoes	3 1, 652 192, 025 5, 247 1, 103 118, 740 74, 800 5, 755 2, 265	12 325 174,796 19,374 775 94,368 76,199 4,870 2,158	40 23, 980 4, 736, 580 131, 960 12, 380 1, 870, 570 1128, 193 414, 610 222, 165	205 3, 081 3, 097, 164 382, 900 6, 625 1, 551, 050 1105, 231 403, 631 202, 914	

1 Tons.

The area in corn increased in ten years 9.9 per cent, and there was an increase of 52.9 per cent in the number of bushels produced. The average yield per acre in 1889 was 17.7 bushels, and in 1899, 24.7 bushels. The wheat production was 24.6 per cent greater in 1899 than ten years before. The production of potatoes showed a gain of 2.7 per cent; sweet potatoes, 9.5 per cent; and hay and forage, 21.8 per cent. The average value per acre of all vegetables, including potatoes, was \$35.75, while that of wheat was \$10.50, and of corn, \$8.98.

CORN AND WHEAT ON FARMS OF SPECIFIED CLASSES.

Tables 21 and 22 present the acreage and production of corn and wheat on farms of some of the leading classes, grouped by race of farmer, tenure, and area.

Table 21.—ACREAGE AND PRODUCTION OF CORN ON FARMS OF SPECIFIED CLASSES, IN 1899.

	Num-	NUMBE		NUMBEI BUSHE	
CLASSES.	ber of farms report- ing.	Total.	Aver- age per farm.	Total.	Aver- nge per nere.
Total	9, 285	192, 025	20.7	4,736,580	24.7
White farmersNegro farmers	8, 527 758	180, 970 11, 055	$21.2 \\ 14.6$	4,521,200 215,380	25.0 19.5
Owners¹ManagersShare tenants	4, 434 117 681 4, 053	75, 174 2, 195 10, 081 104, 625	19. 2 18. 8 14. 7 25. 8	1,798,160 73,920 318,720 2,545,780	21. 1 33. 7 31. 8 24. 3
Under 20 acres	672 4, 042 2, 880 1, 122 569	3, 347 58, 592 68, 418 36, 975 24, 693	5.0 14.5 23.8 33.0 43.4	80, 610 1, 215, 494 1, 618, 532 1, 042, 740 779, 204	24. 1 20. 7 23. 7 28. 2 31. 6

1 Including "part owners" and "owners and tenants."

TABLE. 22.—ACREAGE AND PRODUCTION OF WHEAT ON FARMS OF SPECIFIED CLASSES, IN 1899.

	Num-	NUMBER OF ACRES.		NUMBER OF BUSHELS.	
CLASSES.	ber of farms report- ing.	Total.	Aver- age per farm.	Total.	Aver- age jer acre.
Total	5, 620	118,740	21.1	1,870,570	15.8
White farmers Negro farmers	5, 314 306	115, 161 3, 579	21.7 11.7	1,825,560 45,010	15.9 12.6
Owners 1 Managers Cash tenants Share tenants	90	38, 344 2, 280 7, 526 70, 590	15. 0 25. 3 17. 8 27. 8	587, 550 41, 400 130, 580 1,111, 040	15.3 18.2 17.4 15.7
Under 20 acres	2,050	369 19, 239 40, 257 33, 767 25; 108	3.6 9.5 19.6 35.4 51.6	5, 450 264, 240 585, 510 564, 820 452, 550	15.0 13.7 14.5 16.7 18.0

1 Including "part owners" and "owners and tenants."

Of the 9,687 farms in Delaware, 9,285, or 95.9 per cent produced corn, and 5,620, or 58.0 per cent, raised wheat. White farmers reported the largest average-sized tracts of both grains and produced the largest average yield per acre. The share tenants having, as has been pointed out, the largest farms on an average, also had the largest average acreage in both corn and wheat. The managers and eash tenant farmers reported the largest average yields per acre.

For all farms over 20 acres in area, the average yield of corn and wheat, per acre, increases from the group of smallest average area up to that of the largest average area. This variation is probably due, in large measure, to the improved methods of tillage that characterize the larger farms, and partly to the fact that many of the larger and more highly cultivated farms of the state and the fertile lands formerly devoted to peaches have been given over to corn and wheat culture, and produce unusually large yields of these cereals.

CULTURE OF FLOWERS, AND THE USE OF GLASS IN AGRICULTURE.

There were 31 farms and florists' establishments in Delaware that reported the cultivation and sale of flowers and ornamental plants in 1899. The area devoted to their culture was 30 acres, and the value of the product sold was \$57,013. Of the total number, 21 made commercial floriculture their main business. The proprietors reported greenhouses with a glass surface of 349,320 square feet, and a capital invested in buildings, land, implements, and live stock, of \$182,045, of which \$92,150 represent the value of the buildings. Their sales of flowers and ornamental plants amounted to \$52,792, and the other products raised were worth \$8,175. They expended \$11,767 for labor and \$1,235 for fertilizers.

In addition to the 21 principal florists' establishments, 48 farms and market gardens made use of glass in the propagation of plants, flowers, or vegetables. The area of land under glass was 51,650 square feet, making, with the 261,990 square feet belonging to the florists' establishments, a total of 313,640 square feet.

EXPENDITURES FOR LABOR AND FERTILIZERS.

The amount expended in 1899 for labor, including the value of board furnished, was \$1,075,960, an average of \$111.07 per farm. The expenditure for fertilizers the same year was \$539,040, an increase of 17.1 per cent over the amount expended ten years before.

The great relative importance of fertilizers in the agriculture of Delaware is strikingly shown by the following facts: In 1889 an average expenditure per farm for fertilizers in the North Atlantic States was \$17.38; in the South Atlantic States, \$25.03; while in Delaware it was \$49.08, or nearly twice that of the South Atlantic States, and nearly three times that of the North Atlantic States; but high, relatively, as was this average in Delaware, in 1889, it has increased in the last ten years, \$6.57, and, in 1899, was \$55.65 per farm.